

Title (en)

METHOD AND APPARATUS FOR SIGNAL PROCESSING WITH NEURAL NETWORKS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR SIGNALVERARBEITUNG MIT NEURONALEN NETZEN

Title (fr)

PROCÉDÉ ET APPAREIL DE TRAITEMENT DE SIGNAL AVEC LES RÉSEAUX DE NEURONES

Publication

**EP 3633944 B1 20210728 (EN)**

Application

**EP 18198560 A 20181004**

Priority

EP 18198560 A 20181004

Abstract (en)

[origin: EP3633944A1] Embodiments relate to an apparatus for processing a received radio signal, the apparatus (1) comprising means (5, 6, P; 41, 42) configured for:- processing (S1) received radio signal data with a first signal processing chain (41), wherein said first processing chain (41) comprises at least one first processing module (44, 45) configured for determining first output data ( $y_{<sub>1</sub>}$ ,  $z_{<sub>1</sub>}$ ) based on said received radio signal data,- processing (S1) said received radio signal data with a second signal processing chain (42), wherein said second processing chain (42) comprises at least one second processing module (47, 49) configured for determining an estimation ( $y_{<sub>2</sub>}$ ,  $z_{<sub>2</sub>}$ ) of said first output data ( $y_{<sub>1</sub>}$ ,  $z_{<sub>1</sub>}$ ) based on said received radio signal data, and at least one neural network (48, 50) configured for determining second output data ( $y_{<sub>3</sub>}$ ,  $z_{<sub>3</sub>}$ ) based on said estimation ( $y_{<sub>2</sub>}$ ,  $z_{<sub>2</sub>}$ ),- updating (S2) parameters of said at least one neural network (48, 50) based on a comparison between said first output data ( $y_{<sub>1</sub>}$ ,  $z_{<sub>1</sub>}$ ) and said second output data ( $y_{<sub>3</sub>}$ ,  $z_{<sub>3</sub>}$ ),- after said updating (S2), processing (S4) said received radio signal data with said second signal processing chain (42), without applying said at least one first processing module (44, 45).

IPC 8 full level

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CPC (source: EP US)

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Cited by

WO2022037785A1; WO2021262052A1

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